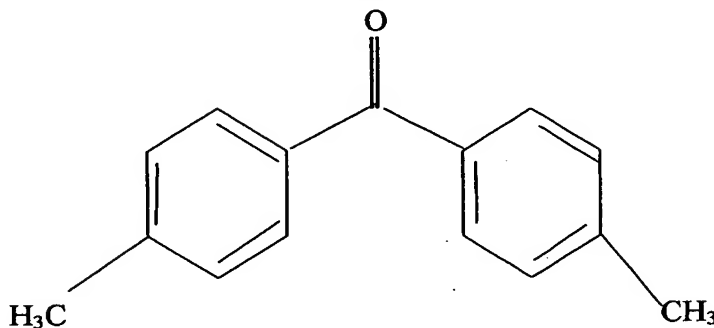


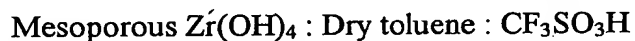
We Claim:

1. A process for preparing 4,4' – dimethylbenzophenone of formula 1

**Formula 1**

which comprises acylating toluene with an acylating agent in the presence of a solid acid triflic acid functionalized mesoporous zirconia catalyst, and separating the product obtained.

2. A process as claimed in claim 1 wherein the reaction is carried out for a time period in the range of 1 to 24 hours.
3. A process as claimed in claim 1 wherein the reaction is carried out at a temperature in the range of 100-150⁰C.
4. A process as claimed in claim 1 wherein the acylating agent is selected from halides of benzoic acids.
5. A process as claimed in claim 1 wherein the triflic acid functionalized mesoporous zirconia catalyst has the molar composition:



wherein $\text{Zr}(\text{OC}_4\text{H}_9)_4$ is Zirconium tetra butoxide, BuOH is 1-butanol, CTMABr is Cetyltrimethylammonium bromide, TMAOH is Tetramethylammonium hydroxide, $\text{Zr}(\text{OH})_4$ is Zirconium tetra hydroxide, and $\text{CF}_3\text{SO}_3\text{H}$ is triflic acid, having $\text{Zr}(\text{OH})_4$ / $\text{CF}_3\text{SO}_3\text{H}$ molar ratio of from 5-30 and a pore size of 0.45 – 0.33 Å, and surface of 371-284 m²/g.

6. A process as claimed in claim 1 wherein the molar ratio of toluene to the acylating agent is in the range of 1:1 to 10:1.
7. A process as claimed in claim 4 wherein the acylating agent comprises para-toluoyl chloride.